Table7: Access and Availability, Nepal GYTS, 2000

Category	Percent of Current Smokers who Usually Smoke at Home	Percent of Current Smokeless tobacco users who chew/apply tobacco at home	Percent of Current tobacco users who Purchased tobacco products in a Store	Percent of Current tobacco users who Bought tobacco in a Store Who Were Not Refused purchase Because of Their Age
Total	8.2 (±5.3)	15.1 (±6.9)	51.3 (±8.1)	75.0 (±12.5)
Sex				
Male	7.6 (±5.1)	10.5 (±5.9)	57.0 (±7.6)	76.1 (±11.7)
Female	*	*	26.3 (±18.5)	*

^{*} Cells having less than 35 in the denominator

Approximately one in ten (8.2%) of the current smoker students usually smoke at home where as nearly one in six (15.1%) of them are using smokeless tobacco at home (Table 7). More than half (51.3%) of the current tobacco users purchased tobacco products in a store and 75% of them were not refused purchase because of their age. Girls were less likely to purchase tobacco products in a store (57.0% vs. 26.3%), the difference is significant.

7. Discussion

The prevalence including attitudinal and behavioral aspects of tobacco smoking habit has been studied in a limited way in some countries^{2,3} including Nepal in the past but no uniform and standardized criteria have been used to make the results strictly comparable. The GYTS is unique in the sense that this is done uniformly and using rigorous methodology in a global context. This has already given some valuable data to plan effective tobacco control program. It is a well-known fact that tobacco smoking starts in the young and the industry is targeting this age group all over the world to hook them with nicotine addiction. So, we have to take this problem very seriously and plan an anti-tobacco program with special focus on youth. From our findings of Nepal survey we would like to comment on the followings:

Tobacco use: The rate of use of tobacco use in young is still not that high as compared to some areas of some of the developing countries. The current smoking rate for girls is significantly lower than that of the boys. This should not lead to any compliancy, as the industry is specially focusing on young girls for their promotional activities all over the world. As a result although the smoking rate in most developed countries are coming down, the rate in young girls in some of them have started increasing. So, we should give special attention to female young smokers to see that the rate do not rise with the ultimate objective being, to bring the rate down to zero.

School curriculum: The data shows that the students are taught about the dangers and harmful effects of tobacco use and they are also discussing tobacco and health as part of lessons in their classes. This is encouraging. It will be wise to focus on the quality of this teaching and improve it to have the maximum effect from such a large response.

Cessation: Three fourth of the students who smoke have expressed their desire to stop and also have made an attempt to stop. So, there is an urgent need for youth oriented counseling services and smoking cessation program to help them to quit smoking.

Environmental tobacco smoke (ETS): A little more than one-third of never smokers and a little more than half of current smokers are exposed to passive smoking in their homes. A substantial proportion (44.7%) of non-smokers and 63.8% of current smokers were exposed to environmental tobacco smoke outside their home. Large majorities, especially of the non-smokers realize that the tobacco smoke is harmful to them and think that it should be banned.

It has been well documented that passive smoking can lead to cancer and recent data have shown that it also increases the risk of coronary artery diseases by as much as 25%¹⁰. So there is a urgent need to advocate for legislation to ban tobacco smoking in public places especially as there is such a large demand from the young boys and girls as well.

Knowledge and attitude: Quite a large number of boys, current smokers (48.3%) think that smokers have more friends. There is a similar feeling in the girls, current smokers but to a lesser extent (32.6%). Similarly, almost one third of boys and almost one fourth of the girls think that smoking makes them more attractive. Such a mis-leading image might have been created due to the promotional activities by the industry and this should be a matter of great concern and needs urgent intervention.

Media and Advertising: The data reveals that more than one-third of never tobacco users and half of the current smokers are exposed to tobacco promotional advertisements in TV, print media, newspaper, magazine and social gatherings. These advertisements are sponsored by the tobacco industry, as they know that the young people are very vulnerable and if they can be hooked at this susceptible age they can be the potential markets for decades. The aggressive advertisement policy of tobacco Industries is unveiled by the fact that they are spending more than Rs. 155 million for tobacco advertisement in a year in Nepal³.

So, immediate legislative action should be taken to ban tobacco advertisement. The legislation should be comprehensive enough to include sponsorship of popular events like sports and other indirect form of ads. In Nepal, the dedicated levy on tobacco (health tax) and use of part of that money to ban tobacco and to

give anti-tobacco messages in electronic media is commendable but to be fully effective this should be extended to print media, billboard and other forms of advertisements and promotion. The offer of free tobacco to as much as 30% of current smokers reveals the aggressive promotional activities of the industry. This contradicts the mis-leading claims made by them that they want to protect the youth from smoking.

Access and availability: Almost one in ten current smoker students are usually smoking at home. This shows the need for parental pressure to stop this tendency. To make such pressure more effective, parents themselves should stop smoking and it has been already realized that the concern for the children's health can be a motivating factor for the parents to stop smoking.

More than half of the current tobacco users purchased the products in the store and three fourth of them were not refused purchase in spite of their young age. So, there is an urgent need for legislation to ban sales of tobacco product to young people and effective implementation of the same.

8. Limitations

This is an important study as it has been done by using globally standardized methodology but as it has been done only in the central development region (CDR) of Nepal, it should not be inferred to represent the whole country.

With due consideration to the cost, required precision and objective of the GYTS, a minimum sample size was taken which was not enough for all kinds of subgroup analysis and statistical tests.

The purpose of the study is to conduct the survey of school going adolescents. In Nepal, more than half of the adolescents do not go to school. A study done by us in small area of a rural community of Nepal has shown a decreasing trend of tobacco smoking rate and development of favorable attitude with increasing educational status in both the sexes^{2,3}. As the present study represent the school going adolescents, it does not represent the true prevalence in the community as a whole.

9. Conclusions

1. Starting smoking at a relatively young age increases the risk of addiction to tobacco smoking. Tobacco industries are targeting youth to hook them to tobacco addiction so as to assure their future markets. There is increasing resistance to advertisement in the developed world but the young adolescents in the developing countries are more vulnerable to the multitude of advertising technique addressing to almost every walks of their life. 44% of never tobacco users and 51.2% of current tobacco users were exposed to tobacco advertisement on print media (Table 6b). Similar proportions of students were also exposed to pro-tobacco advertisements through TV,

newspaper/magazine, social gatherings etc. Nearly one-third (30%) current smokers received free gifts. Although, the tobacco users were more likely to get free gifts, 14.9% non-users also received such gifts. This unveils the fact that the tobacco industries are targeting the youths as against their claim that they don't want the children and adolescents to smoke. Both public and private media and sports and other social activities are vulnerable to tactful tobacco advertisement strategies based on the economic strength and technical know how of the industry. The ban on tobacco advertisement through electronic media is a bold and positive step by the government of Nepal. However, there has to be a total ban on tobacco advertisement including sponsorships. For this purpose, political commitment, promulgation and enactment of anti-tobacco legislation at national level and strong FCTC at global level is essential.

- 2. The prevalence of tobacco use among school students in the CDR, Nepal, is high. Overall 16.3% of the students ever used tobacco product in any form (table 1). Percentage, of current users of any form of tobacco product was 11.6%; the rate in the boys was significantly higher (15.3%) as compared to the girls (6.4%). The overall percentage of cigarette smoking was 4.1%. Many people begin smoking as children and adolescents, at early age when they lack the knowledge and ability to make sound decisions. Majority, (77.7%) of the students were taught about the dangers of smoking, its effect as a part of lession in the class (Table 2). Perhaps, as a consequence, a vast majority (76.8%) of the current smokers expressed their desire and also made an attempt (77.7%) to stop tobacco use (Table3) but without success. There is a need of tobacco cessation intervention program specially designed to the adolescents in schools along with more detailed anti-tobacco classes to them.
- 3. A substantial proportion of non-smokers (44.7%) and current smokers (63.8%) were exposed to tobacco smoke from others outside their home in the past 7 days (Table 4). Boys were significantly highly exposed to secondhand smoke than girls. 72.9% never smokers and 59.7% current smokers think that smoking should be banned from public places This indicates the urgency of anti-tobacco act and strict enforcement of it to ban smoking in public places so as to safeguard the right to breathe smoke-free air. Similarly, the findings also suggest that the school students have great access to tobacco products. More than half (51.3%) current tobacco users purchased tobacco products in a store and 75% of them were not refused purchase because of their age. As such law should also prohibit the sale of tobacco products to the minors.
- 4. The existence of wrong perception of school students about their smoking was also evident from the findings. More than one third (35.4%) never users and almost half (48.3%) current smokers think boys who smoke have more friends (Table 5a). Similarly one fifth (22.4%) of never users and one-third (32.6%) of current smokers think girls who smoke have more friends. About a similar proportion of students also think that smoking makes them more attractive. Since adolescents are likely to pay attention to immediate concern, this value attached to smoking is far more detrimental to their future health. There is a need for awareness program stressing short-term and long-term effects of tobacco use including premature aging, impotency, bad breath, ugly appearance etc.